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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,159	06/17/2002	Michael John Schneider	200-1569	6860

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,159

Applicant(s)

SCHNEIDER ET AL.

Examiner

Lan Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 18 February 2004 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because in figure 2, step 102, "Is Vehicle Experiencing Oversteer or Understeer Condition?" is not a correct illustration of the invention according to the specification, page 2, paragraph [0008], wherein an understeer condition is exclusive to a condition in a front wheel drive vehicle. In figure 3, step 202, "Is Vehicle Experiencing Oversteer or Understeer Condition?" is not a correct illustration of the invention according to the specification, page 2, paragraph [0008], wherein an oversteer condition is exclusive to a condition in a rear wheel drive vehicle.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The amendment filed 2/18/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The removed material changes the invention. Through out the specification, the main objective of the invention is to control regenerative braking. The reason being that in an effort to maximize energy recovery, regenerative braking is being applied disproportionately.

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Hence, the invention attempts to monitor and to reduce the amount of regenerative braking to avoid a situation of either understeering or oversteering caused by regenerative braking. This is evidenced in paragraphs [0008], [0015], [0016], [0017] and [0030]. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- The disclosure is unclear as to how the conditions "understeer" and "oversteer" are defined. According to page 2, paragraph [0008] of the specification, "understeer" is defined as "When a disproportionate amount of regenerative braking torque is applied to the front axle, as in front wheel drive vehicles, it reduces the ability of the front wheels to steer the vehicle, a condition known as understeer." In this context, the amount of regenerative braking torque applied to the front axle is more than desired, i.e. overbraking. Inherently, in order to

determine if an "understeer" condition is present or not, the system must first determine if the front axle is being braked more than it should. However, the invention is illustrated in figure 3 as: in step 202, the condition of understeer is determined and confirmed, then the system proceeds to step 206 to determine if the front axle is overbraked, i.e. the front axle is being braked more than it should. Based on the above reasoning, figure 3 appears to be illustrated and described in reverse order. The same deficiency is present in figure 2 of the invention.

- Furthermore, the specification does not adequately defining the condition "overbraked". Does "overbraked" only referring to too much regenerative braking torque being applied? Or does "overbraked" refers to too much regenerative braking torque and non-regenerative braking force in combination being applied?

Response to Arguments

5. Applicant's arguments filed 2/1/04 have been fully considered but they are not persuasive. Applicant's amendment to the specification has introduced new matter. The objection is stated above. Applicant's argument that the specification provides adequate and clear meaning of the term "overbraked" has been considered but found non-persuasive. Cited paragraphs [0032] and [0036] have been reviewed. These paragraphs simply state: (lines 3 and 4, paragraph [0032]) "axle wheels 42 are overbraked relative to the front axle wheels 64 as compared to the desired brake balance." and (lines 3 and 4, paragraph [0036]) "front axle wheels 64 are overbraked

relative to the rear axle wheels 42 as compared to the desired brake balance." No other explanation is provided for the term "overbraked". The rejection to the claims and the objections to the drawings are still deemed proper and are repeated above.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

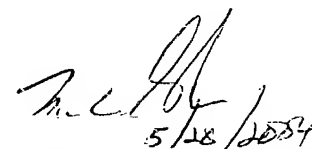
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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5/28/2009

MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310